5.9 LAND USE

The Project includes the construction, operation, maintenance, and abandonment of up to 850 megawatts (MW) of capacity by a solar power generating facility and its ancillary systems in two phases (Phase I: 500MW [approximately 5,838 acres]/Phase II 350MW [approximately 2,392 acres]). The Project will consist of up to approximately 34,000 SunCatchers. Construction is anticipated to occur over an approximate four-year period beginning in 2010 and ending in 2014. It is estimated that approximately an average of 400 construction and 180 long-term labor jobs will be required.

The Project is located in an undeveloped area of San Bernardino County, California, approximately 37 miles east of Barstow, California and north of Interstate 40 (I-40) between approximately 1,925 to 3,050 feet above mean sea level. The Project is located primarily on Bureau of Land Management (BLM) land within the Barstow Field Office. Approval of the Project Right-of-Way (ROW) Grant Application (Form 299, Applications CACA 49539 and 49537) will result in the issuance of a ROW Grant Permit for use of federal lands administered by the BLM. The Project would require a plan amendment to the 1980 California Desert Conservation Area (CDCA) Plan.

The area where the Project would be constructed is primarily open, undeveloped land within the Mojave Desert. The Cady Mountain Wilderness Study Area (WSA) is located north of the Solar One site. The Pisgah Crater, within the BLM-designated Pisgah Area of Critical Environmental Concern (ACEC), is located south and east of the Project (south of I-40 by several miles). Several underground and above ground utilities traverse the area.

An approved interconnection letter from California Independent Service Operator (CAISO) has been issued for the Project. The associated System Impact Study (SIS) is located in Appendix H. The SIS indicates that additional upgrades to the Southern California Edison (SCE) Lugo-Pisgah No. 2 Transmission Line and upgrades at the SCE Pisgah Substation will be required for the full build out of the 850MW Project. Supplemental studies performed by SCE and CAISO indicate that capacity is available on the existing transmission system to accommodate less than the 850MW Project.

An on-site substation (i.e., Solar One Substation [approximately 3 acres]) will be constructed to deliver the electrical power generated by the Project to the SCE Pisgah Substation. Approximately twelve to fifteen 220kV transmission line structures (90 to 110 feet tall) would be required to make the interconnection from the Solar One Substation to the SCE Pisgah Substation. All of these structures would be constructed within the Project Site.

The Project will include a centrally located Main Services Complex (14.4 acres) that includes three SunCatcher assembly buildings, administrative offices, operations control room, maintenance facilities, and a water treatment complex including a water treatment structure, raw water storage tank, demineralized water storage tank, basins, and potable water tank.

Adjacent to the Main Services Complex, a 14-acre temporary construction laydown area will be developed and an approximately 6-acre construction laydown area will be provided adjacent to the Satellite Services Complex south of the Burlington Northern Santa Fe (BNSF) railroad. Two

additional construction laydown areas (26 acres each) one will be located at the south entrance off Hector Road and the other at the east entrance just north of the SCE Pisgah Substation.

Temporary construction site access would be provided off of I-40 beginning east of the SCE Pisgah Substation and would traverse approximately 3.5 miles across the Pisgah ACEC requiring an approximate 50-foot ROW. Long-term permanent access would be provided by a bridge over the BSNF railroad along Hector Road north of I-40. Equipment may be transported during construction via trucks and/or rail car (through the construction of a siding), that would be located on the north side of BNSF railroad and east of Hector Road or as authorized by BNSF.

Water would be provided via a groundwater well located on a portion of the BLM ROW grant north of the Main Services Complex and transported through an underground pipeline. The expected average well water consumption for the Project during construction is approximately 50 acre-feet per year during the construction period. Under normal operation (inclusive of mirror cleaning, dust control, and potable water usage), water required will be approximately 36.2 acre-feet per year. Emergency water may be trucked in from local municipalities.

The following section provides an assessment of land use issues and environmental effects for the Project and its ancillary systems. Specifically, this section provides an evaluation of the Project's conformance with local plans, land use regulations, and general land use compatibility.

The Project Site comprises federal lands (public lands) that are under the jurisdiction of the Bureau of Land Management (BLM), and managed under the California Desert Conservation Area Plan (CDCA Plan) (BLM 1980a, as amended by the West Mojave Plan – CDCA Plan Amendment). Currently, the Project Site lands are managed primarily under multiple use Class M (Moderate) categories in conformance with the CDCA Plan, although some portions are managed under Class L (Limited) (See Figure 5.9-1, Multiple Use Classes). Approval of a right-of-way (ROW) for the development of a solar energy generation project on public lands would require an amendment to the CDCA Plan. According to the Memorandum of Understanding (MOU) between the BLM and the California Energy Commission (CEC), a joint document that combines the CEC Staff Analysis with the BLM Environmental Impact Statement (EIS) will serve as the first step in the joint federal and state environmental review process for the Project. Therefore, land use regulations under the California Environmental Quality Act of 1970 (CEQA) and the National Environmental Policy Act of 1969 (NEPA) are addressed in this section.

NEPA mandates that every federal agency prepare a detailed statement of the effects of "major federal actions significantly affecting the quality of the human environment." The NEPA process is intended to help public officials make decisions that are based on an understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. The BLM administers public and federal lands constituting nearly 15 percent of the state of California's land area, according to NEPA. The BLM-administered public lands are divided into many local areas, and land uses are designated by type within area plans and administered by field offices. The local Barstow Field Office of the BLM, located in Barstow, California, is responsible for the area containing the Project.

Local land use regulatory controls in California vary from one jurisdiction to another. Counties in California are required by law to adopt a comprehensive, long-term general plan for physical development in their jurisdictions. The comprehensive plans include a Land Use Element that establishes the desired pattern of appropriate land use, as well as policies and guidelines for the

development of those uses. Local zoning ordinances, specific plans, and maps are used to implement the Land Use Element of the comprehensive plan. It is important to note that the Land Use Element reflects the desired land use pattern, whereas zoning ordinances and zoning maps reflect current land use designations. Zoning categories for San Bernardino are subject to the land use designations that are found in the 2007 San Bernardino County Development Code (Title 9) (San Bernardino 2007). The Land Use Ordinance contains details about building controls, grading requirements, and regulations for the design and improvement of private and county lands within San Bernardino County.

5.9.1 Affected Environment

Jurisdictions along the transmission line, solar field and access road ROW at the Project Site include the BLM and San Bernardino County. The CEC defines the Affected Environment as the 1-mile area around the boundary of the Project Site. The BLM has jurisdiction over most of the surrounding lands and San Bernardino County has jurisdiction over the remaining private lands that are outside of BLM's jurisdiction. Although the CEC requires land use to be reviewed to include a minimum of a 1-mile buffer zone, for the purposes of this Project, a larger area (approximate 10-mile area) referred to as the study area (see Figure 5.9-2, Surrounding Jurisdictions), was investigated for potential incompatibility and cumulative issues.

Land uses immediately adjacent to the Project Site, within the Project area, include transportation use, open space, and resource conservation (see Figure 5.9-3, Parcel Boundary Map). The Cady Mountains Wilderness Study Area WSA is a resource conservation area located on the northern boundary of the Project Site, as well as a limited recreational area open to camping and some off-road vehicle use. Abutting all boundaries of the Project Site are BLM Class M (Moderate use) lands and BLM multi-use class L (limited use) lands. To the south of I-40 is the Ord-Rodman ACEC.

The lands within the Project boundary are designated multi-use class M (moderate) by the BLM, and are zoned Resource Conservation by the County. The Resource Conservation Zone currently covers all of the county lands within 1 mile of the Project boundary. Within the community of Newberry Springs, located approximately 17 miles west from the Project Site, the existing land use consists primarily of single family homes, including a significant number of mobile homes on individual lots, but also includes recreational vehicle parks, and commercial lots. In addition to the residences in the small community of Newberry Springs, there are some residences within sight of the Project area to the east and southwest, although the density of residences becomes higher nearer to the communities of Newberry Springs and Daggett. One rural residence is located approximately 2 miles east of the eastern border of the Project Site. The next closest residence is located over 5 miles to the southwest of the Project Site.

Other notable land uses near the Project Site include two solar power generating facilities which lie approximately 20 miles to the west. The SEGS 1 and 2 plants use trough technology and are still operating under a Power Purchase Agreement with SCE. A heliostat tower was installed in 1982 and was decommissioned in 1999. It now serves as a telescope that is operated by the University of California, Davis. A traditional power plant is also located adjacent to these two plants.

5.9.1.1 Regional Setting

The Project Site is on public land that is administered by the BLM and private land under the jurisdiction of San Bernardino County. The Project Site is located within an unincorporated area of eastern San Bernardino County and in the eastern section of the West Mojave Plan Area. The Project Site lies completely within the West Mojave Planning Area. Newberry Springs is the nearest incorporated town, which is approximately 17 miles from the Project Site (see Figure 5.9-2, Surrounding Land Ownership. The existing land uses in Newberry Springs consist primarily of single family homes, including mobile homes on individual lots, recreational vehicle parks, and commercial lots. In addition to the residences in the small community of Newberry Springs, there are some residences within sight of the Project area to the east and southwest, although the density of residences becomes higher nearer to the communities of Newberry Springs and Daggett. The next closest residence is located over 5 miles to the southwest of the Project Site.

The West Mojave Planning Area covers most of the county and includes the communities of Newberry Springs, Spring Valley, Daggett, and Barstow. Barstow, Spring Valley and Daggett are located west of the Project Site. Ludlow is located to the east of the Project Site. The West Mojave Planning Area encompasses approximately 108,000 acres (168.5 square miles) of sparsely populated BLM-administered public and county open space lands.

The West Mojave Planning Area includes the entire groundwater basin. The area contains no agricultural land except large pistachio orchards near Newberry Springs. The area is divided among BLM-administered public and private lands dedicated for the most part to open space and/or recreational use.

The developed area of the County (including incorporated cities, unincorporated communities, and supporting facilities) composes a small part of the total land area. The majority of the land in the West Mojave Planning area is dedicated to open space, conservation and/or recreation. Joshua Tree is a 37-square-mile national park located in the southern portion of San Bernardino County. Nearby resource conservation areas include the Ord-Rodman Mountains, the Cady Mountains, and the Pisgah lava flow. Historic U.S. Route 66 is south of the Project.

5.9.1.2 Project Site and Vicinity

The jurisdictional boundaries in San Bernardino County, the proposed Solar One site footprint and assessors parcel number (APN) lot boundaries, and Surrounding Land Ownership are shown on Figure 5.9-2, Surrounding Land Ownership, and 5.9-3 Parcel Boundary Map. The Project Site and construction staging areas are generally located east of the small community of Newberry Springs and west of the small community of Ludlow, between I-40 on the south and the Cady Mountains WSA on the north, in San Bernardino County, California.

The western portion of the Project Site is generally flat, sloping up gently to the northeast. The central and western portions of the site are characterized by low and moderate relief alluvial zones and natural drainages. Site elevations range from approximately 1925 and 3050 feet above mean sea level. The Project Construction Staging Areas are described in the Project Site Plan (see Figure 3-3 in Section 3). The boundary follows a meandering path, extending 3 miles north

and 8 miles east. On the east by the easterly section line of Sections 4 in Township 8 North, Range 6 East (see Figure 5.9-3, Parcel Boundary Map).

Approximately 8,230 acres of land is requested to be authorized under a ROW grant under Title V of the Federal Land Policy and Management Act of 1976 (FLPMA) and Title 43, Code of Federal Regulations (CFR) Part 2804, from the BLM. The amount of land to be fenced and developed within the BLM-administered public areas is estimated to be 8,230 acres. Private lands located within the Project boundary are labeled as Not A Part (NAP) of the Project and development of the solar fields is not anticipated to occur on them. Land owners will be granted access to their parcels.

SOLAR ONE, PHASE I

- That portion of Township 9 North, Range 5 East, San Bernardino Base and Meridian, being described as follows;
- The East one-half of Section 36.
- TOGETHER WITH those portions of Township 8 North, Range 5 East, San Bernardino Base and Meridian, being described as follows;
- The East one half of Section 1,
- The East one-half of Section 12 lying Northerly of the Northerly Right-of-Way line for the Burlington Northern Santa Fe (BNSF) Railroad.
- TOGETHER WITH those portions of Township 9 North, Range 6 East, San Bernardino Base and Meridian, being described as follows;
- Sections 31 and 32,
- The West one-half of Section 33, and the West one-half of the East one-half of said Section 33.
- TOGETHER WITH those portions of Township 8 North, Range 6 East, San Bernardino Base and Meridian, being described as follows;
- Sections 5 and 6,
- Section 7 lying Northeasterly of said Northerly Right-of-Way line for the BSFN Railroad,
- Sections 4, 8 and 9 lying Northwesterly of a line parallel with and 150.00 feet Northwesterly from the existing Southern California Edison Company's Electric Transmission line as it existed on November 01, 2008,
- Section 17 lying Northwesterly of a line parallel with and 150.00 feet Northwesterly from said Southern California Edison Company's Electric Transmission line and Northeasterly of said Northerly Right-of-Way line for the BSFN Railroad,
- Section 18 lying Northeasterly of said Northerly Right-of-Way line for the BSFN Railroad.

SOLAR ONE, PHASE II

- Those portions of Township 9 North, Range 5 East, San Bernardino Base and Meridian, being described as follows;
- The East one-half of Section 35,
- The West one-half of Section 36.
- TOGETHER WITH those portions of Township 8 North, Range 5 East, San Bernardino

Base and Meridian, being described as follows;

- The West one-half of Section 1,
- The East one-half of Section 2,
- The North one-half and the West one- half of the East one-half of Section 8 lying Northerly of the Northerly Right-of-Way line for the Mojave Pipeline Company, and Southerly of the Southerly Right-of-Way line for the Burlington Northern Santa Fe (BNSF) Railroad and the East one-half of the East one-half of said Section 8,
- Section 9 lying Southerly of said Southerly Right-of-Way line for the BSFN Railroad,
- The South one-half of Section 10 and the Northeast one-quarter of said Section 10 lying Southerly of said Southerly Right-of-Way for the BSFN Railroad,
- Section 11 lying Southerly of said Southerly Right-of-Way line for the BSFN Railroad and the Northeast one-quarter of said Section 11 lying Northerly of the Northerly Right-of-Way line of said BSFN Railroad,
- Section 12 lying Southerly of said Southerly Right-of-Line for the BSFN Railroad and the West one-half of said Section 12 lying Northerly of said Northerly Right-of-Way line for the BSFN Railroad,
- Section 13 lying Northerly of said Northerly Right-of-Way line for the Mojave Pipeline Company,
- The Northeast one-quarter and the East one-half of the Northwest Quarter of Section 14 lying Northerly of said Northerly Right-of-Way line for the Mojave Pipeline Company and the West one-half of the Northwest Quarter of said Section 14 lying Northerly of the Northerly Right-of-Way line of Interstate Highway 40,
- Sections 15, 16 and the East one-half of the East one-half of Section 17 lying Northerly of said Northerly Right-of-Way line of Interstate 40.
- TOGETHER WITH those portions of Township 8 North, Range 6 East, San Bernardino Base and Meridian, being described as follows;
- Section 7 lying Southwesterly of said Southwesterly Right-of-Way line for the BSFN Railroad,
- Section 18, lying Northwesterly of a line parallel with and 150.00 feet Northwesterly from the existing Southern California Edison Company's Electric Transmission line as it existed on November 01, 2008 and Northerly of said Northerly Right-of-Way for the Mojave Pipeline Company.

The Project Site will be developed with 34,000 SunCatchers and associated ancillary facilities and linears, which would result in approximately 2,712 acres of total permanent surface disturbance, with the balance of the acreage within the Project Site left undisturbed or for drainage. Construction would result in temporary surface disturbance of approximately 3,270 acres.

The balance of the estimated disturbed areas listed by Project component is provided in Table 5.9-1, Estimated Disturbed Area Summary.

Table 5.9-1 Estimated Disturbed Area Summary

Project Component Item Construction Disturbance Comments		Area		<i>_</i>	
Off-site access road 11 acres 11 acres 3 miles 30-foot width for roadway and drainage from 1-40 Off-site transmission line 0.9 acres Included below 0.14 miles 50 feeter side of center Tower structures Included above 0.02 to 0.05 acres 1 to 2 towers x 1,024 SF per tower Subtotal 12 acres 11 acres 11 to 2 towers x 1,024 SF per tower	Project Component Item		Permanent		Comments
Off-site transmission line Off-site transmission line Tower structures Included above 0.02 to 0.05 acres Included above I to 2 towers x 1,024 SF per tower Subtotal 12 acres 11 acres On-Site Balance-of-Plant Development Construction staging and construction administration area near BNSF/SCE Pisgah Substation Construction staging and construction administration area at Hector Road On-site construction laydown I1 acres N/A Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation 11 acres N/A Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation 12 foot width construction acrea at Hector Road 13 smiles 14 feet each side of the fence 14 feor width construction acreas 14 feet wide 15 acres 16 miles 17 feet wide 18 feet each side of the fence 19 feet width for roadway and drainage Construction disturbance based on buildings, parking, assembly, and construction areas Construction disturbance based on buildings, parking, assembly, and construction areas Post construction the assembly building and their associated laydown areas will be decommissioned and disher associated laydown areas will be decommissioned and disher associated laydown areas will be decommissioned and disher associated laydown areas will be decommissioned and during construction of Phase II Assembly buildings used during construction of Phase II	Off-Site Development				
Tower structures	Off-site access road	11 acres	11 acres	3 miles	
Subtotal 12 acres 11 acres 12 acres 12 acres 12 acres 13 approx. 0.5 mi north of SCE Pisgah Substation 26 acres area at Hector Road 25 acres N/A Located in Phase I, approx. 0.5 mi north of SCE Pisgah substation 26 acres area at Hector Road 26 acres N/A Located in Phase II approx. 0.5 mi north of SCE Pisgah substation 26 acres N/A Located in Phase II approx. 0.5 mi north of SCE Pisgah substation 26 acres N/A Located in Phase II approx. 0.5 mi north of SCE Pisgah substation 26 acres N/A Located in Phase II approx. 0.5 mi north of SCE Pisgah substation 26 acres N/A Located in Phase II approx. 0.5 mi north of SCE Pisgah substation 26 acres N/A Located in Phase II 2-foot width construction access; 3 feet each side of the fence 38 miles 30 feet width construction access; 3 feet each side of the fence 30 feet width for roadway and drainage 12 feet wide 20 construction disturbance based on buildings, parking, assembly, and construction areas Construction Con	Off-site transmission line	0.9 acres	Included below	0.14 miles	50 feet each side of center
Construction staging and construction as a paragraph of the property of the	Tower structures	Included above	0.02 to 0.05 acres		·
Construction staging and construction administration area near BNSF/SCE Pisgah Substation Construction staging and construction administration area at Hector Road On-site construction laydown 11 acres N/A Located in Phase II Approx. 0.5 mi north of SCE Pisgah substation Located in Phase II	Subtotal	12 acres	11 acres		
construction administration area near BNSF/SCE Pisgah Substation Construction staging and construction administration area at Hector Road On-site construction laydown The properties of the properties of the fence of the fence Site boundary fence line of the fence of the fence of the fence Site paved roadways of the fence of	On-Site Balance-of-Plant Dev	velopment			
construction administration area at Hector Road On-site construction laydown 11 acres N/A Located in Phase II Located adjacent to MSC 12-foot width construction access; 3 feet each side of the fence 38 miles 30 feet width for roadway and drainage Unpaved perimeter roadways 15 acres 111 acres 15 acres 10 miles 12 feet wide Construction disturbance based on buildings, parking, assembly, and construction areas Construction areas Construction areas Included above N/A Assembly buildings and storage Included above N/A Located in Phase II Located in Phase II Located adjacent to MSC 12-foot width construction access; 3 feet each side of the fence 38 miles 30 feet width for roadway and drainage Construction disturbance based on buildings, parking, assembly, and construction areas Construction areas Post construction the assembly building and their associated laydown areas will be decommissioned and dishes installed on this acreage. The MSC assembly buildings used during construction of Phase I will be moved to the SSC for the construction of Phase II	construction administration area near BNSF/SCE Pisgah	26 acres	N/A		approx. 0.5 mi north of
Site boundary fence line 55 acres 28 acres 38 miles 12-foot width construction access; 3 feet each side of the fence 30 feet width for roadway and drainage Unpaved perimeter roadways 15 acres 15 acres 10 miles 12 feet wide Construction disturbance based on buildings, parking, assembly, and construction areas Satellite Services Complex 21 acres 10 acres 10 acres Post construction the assembly building and their associated laydown areas will be decommissioned and dishes installed on this acreage. The MSC assembly buildings used during construction of Phase I will be moved to the SSC for the construction of Phase II	construction administration	26 acres	N/A		Located in Phase II
Site boundary fence line 55 acres 28 acres 38 miles access; 3 feet each side of the fence Site paved roadways³ 138 acres 111 acres 38 miles 30 feet width for roadway and drainage Unpaved perimeter roadways 15 acres 15 acres 10 miles 12 feet wide Construction disturbance based on buildings, parking, assembly, and construction areas Satellite Services Complex 21 acres 10 acres 21 acres 21 acres 21 acres 22 acres 24 acres 24 acres 25 acres 25 acres 28 acres 28 acres 28 acres 29 acres 29 acres 20 acres	On-site construction laydown	11 acres	N/A		Located adjacent to MSC
Unpaved perimeter roadways 15 acres 15 acres 10 miles 12 feet wide Construction disturbance based on buildings, parking, assembly, and construction areas Satellite Services Complex 21 acres 10 acres 10 acres Construction disturbance based on buildings, parking, assembly, and construction areas Construction disturbance based on buildings, parking, assembly, and construction areas Post construction the assembly building and their associated laydown areas will be decommissioned and dishes installed on this acreage. The MSC assembly buildings used during construction of Phase I will be moved to the SSC for the construction of Phase II	Site boundary fence line	55 acres	28 acres	38 miles	access; 3 feet each side of
Main Services Complex 42 acres 14.4 acres Construction disturbance based on buildings, parking, assembly, and construction areas Construction disturbance based on buildings, parking, assembly, and construction areas Construction disturbance based on buildings, parking, assembly, and construction areas Post construction the assembly building and their associated laydown areas will be decommissioned and dishes installed on this acreage. The MSC assembly buildings used during construction of Phase I will be moved to the SSC for the construction of Phase II	Site paved roadways ³	138 acres	111 acres	38 miles	
Main Services Complex 42 acres 14.4 acres based on buildings, parking, assembly, and construction areas Satellite Services Complex 21 acres 10 acres Construction disturbance based on buildings, parking, assembly, and construction areas Assembly buildings and storage Post construction the assembly building and their associated laydown areas will be decommissioned and dishes installed on this acreage. The MSC assembly buildings used during construction of Phase I will be moved to the SSC for the construction of Phase II	Unpaved perimeter roadways	15 acres	15 acres	10 miles	12 feet wide
Satellite Services Complex 21 acres 10 acres based on buildings, parking, assembly, and construction areas Post construction the assembly building and their associated laydown areas will be decommissioned and dishes installed on this acreage. The MSC assembly buildings used during construction of Phase I will be moved to the SSC for the construction of Phase II	Main Services Complex	42 acres	14.4 acres		based on buildings, parking, assembly, and
Assembly buildings and their associated laydown areas will be decommissioned and dishes installed on this acreage. The MSC assembly buildings used during construction of Phase I will be moved to the SSC for the construction of Phase II	Satellite Services Complex	21 acres	10 acres		based on buildings, parking, assembly, and
		Included above	N/A		assembly building and their associated laydown areas will be decommissioned and dishes installed on this acreage. The MSC assembly buildings used during construction of Phase I will be moved to the SSC for the
	Subtotal	334 acres	178 acres		

SECTIONFIVE

Table 5.9-1 Estimated Disturbed Area Summary

	Area			
Project Component Item	Construction Disturbance	Operations Permanent Disturbance	Proposed Length	Comments
On-Site Wet and Dry Utilitie	s Access			
Water pipeline	3.6 acres	2.9 acres	2 miles	Disturbance based on 2-in diameter waterline from MSC to SSC; 15-ft wide construction access; 12-ft wide operations access
On-site electrical and communications overhead service	5 acres	N/A	9,068 feet	12 feet each side of center
Solar One Substation	4 acres	2.8 acres		530 feet by 555 feet
On-site transmission line	10.3 acres	N/A	1.7 miles	50 feet each side of center
Transmission access road	Included above	2.5 acres	1.7 miles	12 feet wide
Transmission tower structures	Included above	0.3 acre		12 to 14 towers at 1,024 SF per tower
34.5kV overhead runs to Solar One Substation	6.0 acres	N/A		17 miles by 12-foot wide with a significant portion overlapping other construction disturbed areas (75 percent)
Subtotal	29 acres	9 acres		

Table 5.9-1 Estimated Disturbed Area Summary

		rea	- Garantian y	
Project Component Item	Construction Disturbance	Operations Permanent Disturbance	Proposed Length	Comments
Solar Field Development = 56	67 by 1.5MW Sola	r Groups ^{2,4}	1	1
SunCatcher drainage swale	874 acres	874 acres		40 feet wide by 56 feet long per 2 SunCatchers
SunCatcher foundation	2.5 acres	2.5 acres	12 to15 ft	2-ft diameter post
SunCatcher pad clearing	110 acres	110 acres		12 foot wide by 12 foot long cleared pad area for each SunCatcher, excluding foundation area
North-south access routes	262 acres	262 acres	180 miles	12-foot wide road servicing 2 SunCatchers
East-west access routes	31 acres	31 acres	21 miles	12-foot wide road within area of limited disturbance constructed over 600V Collector Cable; 40 feet long by 12 feet wide per 12 SunCatchers
East-west PCU access routes	702 acres	702 acres	386 miles	15-foot wide road servicing each SunCatcher PCU and providing east- west access to dish groups over generator group feeders
Debris basins for off-site flows	220 acres	220 acres		Located along northern project boundary
Debris basins for on-site flows	65 acres	65 acres		Located throughout the site
Subtotal	2,265 acres	2,265 acres		
Electrical Collection System				
North-south 600 V underground	60 acres	N/A		cable disturbance based on north-south cables outside of roadways cable trench based on 2- foot each side of center of cable, excluding previously accounted disturbance
1750kVA transformers, junction boxes, and east- west 600 V underground	235 acres	2 acres		1 transformer with collector panel and 4 junction boxes per 1.5MW with east-west 600 V cables disturbance based on 41 feet by 88 feet area per group of 12 SunCatchers

Estillated Disturbed Area Sullillary				
	Area			
Project Component Item	Construction Disturbance	Operations Permanent Disturbance	Proposed Length	Comments
34.5kV underground	38 acres	N/A		cable trench based on 6- foot each side of center, excluding previously accounted disturbance
Subtotal	333 acres	2 acres		
Total Area	3,270 acres	2,712 acres		Includes 10% contingency

Table 5.9-1
Estimated Disturbed Area Summary

Source: Stirling Energy Systems, Inc., 2008.

Notes:

During installation of the SunCatchers, approximately 80 percent of the total land will be disturbed by brush trimming operations. The proposed construction method combined with the modularity of the SunCatcher design and off-site manufacturing will enable a phased deployment, thereby minimizing the proportion of the overall site that is disturbed at any give time during construction.

The plan site layout minimizes traffic road operations of the Project.

kV = kilovolt

MW = megawatt

N/A = not applicable

SF = square feet

V = volts

An existing transmission line corridor currently runs along the eastern boundary of the site from the northeast to southeast corner of the Project Site, connecting to the SCE Pisgah Substation (Pisgah Substation). Project components include a new substation on-site (Solar One Substation), on-site overhead distribution lines, overhead transmission infrastructure for interconnection to the Pisgah Substation and electrical grid. The proposed 220kV transmission line would traverse approximately 1.00 mile within the Project ROW.

There will be approximately 587 miles of two-track roads on site, with 38 miles of on-site paved roads including 10 miles of unpaved perimeter roads. Other ancillary features include telecommunications facilities, operations and maintenance buildings, and other associated facilities.

Under Phase I, Solar One will construct a solar power plant with a total capacity of 500MW that will connect via a new 220kV 3-Phase Single Circuit interconnect transmission line to be constructed by the Applicant. The power will be delivered to the electrical grid from the on-site substation to the Pisgah Substation.

The additional power from Phase II will provide an additional capacity of 350MW to the Pisgah Substation via the 220kV 3-Phase Single Circuit interconnect transmission line constructed by the Applicant during Phase I. The power from Phase II will be delivered to the electrical grid from the Pisgah Substation. The total Project capacity, when complete, will be 850MW.

¹Refer to Figures 3-1 through 3-3 for locations of Project components.

²Assumes 850MW net development of 34,000 SunCatchers.

³The term "paved roadway" refers to a roadway surface that allows for heavy weight vehicles to travel at a greater speed. Additional binder concentration may be applied in lieu of asphalt pavement or pavement may be added for operations phase.

⁴Reference Figure 3-28, 1.5MW Solar One Construction Disturbance Plan.

Based on specifications of the transmission line structures, tower footprints would be approximately 64 square feet. On-site permanent gravel access roads would vary in width with a median of 12 feet. The on-site transmission line would be approximately 1.7 miles long, with approximately 750 feet of offsite transmission line, resulting in a total of between 12 and 15 transmission towers depending on the actual span between each tower (see Section 3.0, Project Description and Location, for associated figures and a further description of Project features).

5.9.1.3 Site Control

The approximate 8,230-acre Project Site is located on several legal parcels. The title report for the parcels is included in Appendix C, Property Owners within 1,000 Feet of Project Site. The Project Site would be owned and operated by SES.

5.9.1.4 Agricultural Land

The land that would be enclosed within the Project boundary and/or associated infrastructure is not currently used for agricultural production but is undeveloped desert. There is no crop production on the Project Site, within the Project area, or vicinity because the soils of the Project Site and areas within a 5-mile radius of the Project Site are not suitable for irrigated crop production or dry farming according to the San Bernardino County General Plan Agriculture Element.

The rural areas of the Planning Area contain no parcels of farmland that are protected by the California Land Conservation Act of 1965 (Williamson Act). In addition, the Project area does not contain prime farmlands, farmlands of statewide significance, nor farmlands of local importance, and no parcels within the Project area are subject to the Williamson Act. The Project Site is not within any specified agricultural areas and does not contain the preferred soils or water availability that promotes intensive agricultural use. The Project Site therefore does not contain any farmland areas and will not contribute to loss of productive farmland.

5.9.1.5 Airfields

The closest airfield is the Barstow-Daggett Airport, approximately 27 miles to the west of the Project Site. Airfields Federal Aviation Agency Advisory Circular 70/7460-1K requires that all airspace obstructions over 200 feet in height or in close proximity to a military airfield have obstruction lighting. The tallest structures proposed on-site are the transmission towers at between 90 and 110 feet high. Since the transmission poles are below the 115 feet height limit for this part of San Bernardino County, and because there is no airfield in close proximity to the site, the poles would not require obstruction lighting.

The proposed transmission poles would be immediately adjacent to the existing ROW, no effects to aircraft operation are expected. Since all local airfields are more than 7 miles from the Project Site, potential glint and glare from the solar reflectors is not expected to distract and/or affect pilots during landing or take-off operations. The conclusion of this analysis is supported by real-world experience under similar conditions at the Kramer Junction Solar Electric Generating Station located in Barstow, California.

In addition, the Application for Certification (AFC) prepared for the Victorville 2 Hybrid Power Project (07-AFC-1) identified that the United States Air Force conducted overflights over an existing solar energy facility (the solar energy generating station power plant in the Mojave Desert at Harper Lake) to determine if the facility produced visual distractions for pilots. It was documented that no significant visual distractions were observed during the overflights.

Given CEC staff accounts and documentation reviewed within the Victorville 2 Hybrid Power Project AFC (07-AFC-1), it is not expected that the Project solar array would cause adverse effects to aviation operations at local military airfields.

5.9.1.6 Project Site Preparation and Construction

Project construction activities would include all work on the main site, installation, connection, access road and infrastructure improvements, and Project startup. Sequential activities for onsite and off-site work would include site preparation; foundation construction; erection of major equipment and structures; installation of piping and pumps, electrical systems, and control systems; and startup/testing.

Construction of the Project, from site preparation and grading to full commercial operation, is expected to take approximately four years. Heavy construction would be scheduled between 0700 and 1900, Monday through Friday, and between 0700 and 1300 on Saturdays. Additional hours could be necessary to make up schedule deficiencies or complete critical construction activities. Some activities would continue 24 hours per day, seven days per week. These activities would include, but would not be limited to, building Suncatchers, refueling equipment, staging material for the following day's construction activities, quality assurance/control, and commissioning. During these hours, noise would be within regulatory limits determined by the Development Code (San Bernardino County 2007). See Section 5.12, Noise.

The Project Site is crossed by well-defined dry drainages and localized mounds. The Main Services Complex would be graded to provide a level pad area for buildings, tanks, the substation, and all associated Project facilities. Earthwork movement of soil material would be limited to that required for a level site for Project equipment and systems, along with grading of berms and/or channel improvements as necessary to provide for adequate flood protection. No need for fill is anticipated, but if it is required, material present on-site in the vicinity of the pad location is expected to be adequate, subject to final geotechnical evaluation. Construction of the solar field requires a generally level to mild sloped ground surface to avoid shading impacts; however, grading of the proposed SunCatcher footprint would not require compaction and would be limited to brush trimming along with a limited blading operation (see Section 3.0, Project Description and Location). Additionally, temporary access will be required along the Pisgah transmission line ROW, within the "G" utility corridor to the east of the Project Site. It is proposed that temporary access would be via the existing Pisgah Crater Road, County Road 20795. Construction equipment would run approximately 3.5 miles across the Pisgah ACEC requiring an approximate 30-foot ROW. Since the temporary access is to be located on an open route (via Pisgah Crater Road), within the utility corridor, it is not expected to cause any lasting adverse effect to land use.

There would be no long-term significant effects to land uses within the Project area or study area as a result of construction activities. Land uses near the Project Site could experience short-term

effects associated with Project construction, including visual disruption, increased traffic, dust, increased noise levels, equipment, and vehicle emissions. Additional information on these issues is provided in Section 5.2, Air Quality; Section 5.11, Traffic and Transportation; Section 5.12, Noise; and Section 5.13, Visual Resources.

Although construction activities could result in temporary land use effects, the Project construction is consistent with existing and past surrounding development such as transmission lines, substation, and industrial solar energy generation developments. Large-scale construction activities at the Project Site are not expected to significantly affect the use and enjoyment of surrounding land uses. Some project activities may increase traffic counts and/or have safety implications (refer to Section 5.11, Traffic and Transportation, and Section 5.16, Public Health and Safety). The short-term effects from Project construction activities are considered to be less than significant.

5.9.1.7 Project Closure

Planned permanent closure effects would be incorporated into the Project closure plan and evaluated at the end of the solar plant's operating life.

5.9.1.8 Operations and Maintenance

Project operations will consist of few inputs, most of which would be associated with the day-to-day operations and maintenance of the facilities, and the resulting energy production will decrease the area's reliance on imported non-renewable electricity. There are no recently proposed zone changes that affect this Project Site, and no changes to the general provisions for development of solar energy.

In general, the operation and maintenance of the Project is compatible with adjacent and surrounding land uses. Operations and maintenance will not disturb the recreational use of surrounding land (e.g., off-highway vehicle [OHV] use, hiking and hunting) and open space conservation in surrounding areas. There will, however, be a loss of recreational use at the Project Site which is moderately used for limited OHV use. Nearby ACECs would not be disturbed except for temporary access via an existing route located in Utility Corridor "G" within the Pisgah ACEC (please see complete discussion in section 5.9.4.3). Further, the Project may act as a barrier between the Cady Mountain WSA, limiting unauthorized access into this special management area. Of the few residences in the vicinity only one has direct views of the Project and Project operations will not divide any established communities. The Project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect; nor will the Project conflict with any applicable habitat conservation plan or natural community conservation plan (see Section 5.9.3.1, Bureau of Land Management Land Use Plan Amendment, for a discussion of applicable conservation plans).

5.9.2 San Bernardino County Planning Policy

The Project would consist of approximately 34,000 SunCatchers, and associated infrastructure, producing up to 850MW net (see Section 3.0, Project Description and Location, for information on the solar field).

The Bureau of Land Management has developed a memorandum of understanding (MOU) with San Bernardino County. The MOU ensures that the County and BLM will work together in environmental reviews and public participation on renewable energy projects. Although most proposed projects in San Bernardino County are on federal public lands, the county has jurisdiction if they include private land or require county permits. In either case, the county will be a formal partner in sharing information and developing reviews.

San Bernardino County Supervisor, Brad Mitzelfelt's First District, includes much of the Mojave Desert, and the Project is proposed for his district. Solar thermal projects that generate more than 49MWare under the jurisdiction of the California Energy Commission (CEC). The CEC has received more than 80 solar energy applications from numerous companies, some filing multiple applications, and others filing overlapping applications for solar power generation facilities using several different types of solar energy technologies.¹

Under a hypothetical county planning process, the construction of the Project would require a CUP and associated building, construction, and grading permits. A General Plan Amendment application must be concurrently filed and approved to apply the new Energy Facility (EF) Overlay. The Development Code (San Bernardino County 2007) designates land use within the planning area by land use category. The current land use designation for the private lands within the study area and Project Site is Resource Conservation. Other regional uses are primarily open space, with some rural residences related, small towns and villages such as Daggett and Newberry Springs, and the larger urban area of Barstow, and Twentynine Palms military base. Open space areas to the north, east, and west of the Project area are also governed by BLM. The Project does not conflict with any applicable land use plans, policies, or regulations within the General Plan Elements of the County General Plan.

Environmental effect issues associated with current land use at the Project Site are located in the Open Space Element of the General Plan and the Resource Conservation Zone. Environmental issues associated with solar energy conversion on private lands are outlined in the San Bernardino County General Plan, (2007). The potential effect issues described are: aesthetic and safety concerns, removal of agricultural land for other purposes, responsible use of open space and resources; erosion and biological concerns in some areas, and water use and chemical spills in the case of solar thermal designs.

The potential land use effects that relate to the Project are the loss of open space and responsible use of resources. The Project would permanently change the nature of land use at the Project Site from Resource Conservation, to an intensive utility for the generation of renewable electrical power. Solar energy conversion is an allowable use for the Project area, pursuant to a CUP, according to the San Bernardino County Department of Planning. With the granting of a CUP and General Plan Amendment under a Hypothetical County Process, the Project would be in compliance with the goals and policies of the San Bernardino County General Plan and the provisions of the LUO (San Bernardino County 2008e). However, the majority of the Project Site is comprised of BLM-administered public land and is managed under the CDCA Plan and the county is not the jurisdictional authority for the Project. Compliance with land use

¹ BLM Website: www.blm.gov/ca/st/en/info/newsroom/2008/march/CDDNews0840_sbcounty_mou.html

designations at the Project Site would require BLM review and approval. For a discussion of the BLM planning process see Section 5.9.3.1, Bureau of Land Management Land Use Planning.

Other potential effects are discussed in Section 5.4, Soils; Section 5.13, Visual Resources; Section 5.15, Hazardous Materials Handling; Section 5.16, Public Health and Safety; and Section 5.17, Worker Safety.

The Project is not expected to adversely affect the enjoyment or use of proximate properties or conflict with any applicable San Bernardino County land use plan, policy, or regulation.

There are some private parcels (zoned Resource Conservation) that are located within the Project boundary. These private parcels would be under the jurisdiction of the County of San Bernardino; however, they are not owned or controlled by the Project and will not be enclosed within the Project fence line, and they are not considered a part of the Project. Post construction, access to these parcels will be provided via Hector Road or the Project will provide access to these sites via a new access road, as necessary. There are no anticipated adverse effects expected to occur in relation to private parcels located adjacent to the Project.

The nearest residence to the Project is located approximately 2 miles east of the Project Site. This single home is surrounded by open space, but the land use is residential. In addition, there is a dwelling located approximately 6 miles southwest of the Project Site. Conversion of the Project Site land use is not expected to alter either of these residential lands uses. Therefore, no significant effects to land use are expected. Potential visual effects associated with these residences are discussed in Section 5.13, Visual Resources.

To the west of the Project Site there are two areas that are zoned for low-density residential use on parcels of 40 acres or more. However, few homes are currently occupying acreage within 5 to 7 miles of the Project boundary.

There are no foreseeable effects to the land use of local (10 miles) residential land uses for the purposes that they are currently used. Although the Project would contrast significantly with the surrounding land use in terms of character, the Project is an allowable use requiring a CUP within the Resource Conservation zone; thus, the Project would not require variance in noise levels, use regulations, or LUO. Potential visual effects relative to nearby residences are discussed in Section 5.13, Visual Resources.

The proposed renewable energy installation and the opportunity to observe the development of a large solar array may be of educational benefit to the students of regional schools and provide material for instruction and a field trip destination during construction and upon completion of the Project.

According to the 2002 California Renewables Portfolio Standard, utilities such as SCE are required to achieve a 20 percent renewable energy portfolio by 2010, and as of November 17, 2008, Governor Schwarzenegger has raised this goal to 33 percent by 2020 (Executive Order S-14-08). Current California energy policy calls for more development of solar energy, promotion of sustainable business, and greater use of renewable forms of energy. The Energy Policy Act of 2005 (Public Law 109-58, 8 August 2005) encourages development of renewable energy resources, which includes solar energy. Section 211 of the Energy Policy Act of 2005 encourages the approval of at least 10,000MW of non-hydropower renewable energy projects on public land within the next 10 years.

According to the land use goals and policies of the San Bernardino County General Plan, Conservation Element, the Project Site is compatible with solar energy conversion. In the Conservation Element Goal 8 includes language that encourages energy conservation and the encouragement of new energy saving or supply technologies such as solar energy technologies. Furthermore, the Project supports the following goals and objectives found in this element.

GOAL CO 4: The County will ensure good air quality for its residents, businesses, and visitors to reduce impacts on human health and the economy.

• CO 4.12: Provide incentives to promote siting or use of clean air technologies (e.g., fuel cell technologies, renewable energy sources, UV coatings, and hydrogen fuel).

GOAL CO 8: The County will minimize energy consumption and promote safe energy extraction, uses, and systems to benefit local regional and global environmental goals.

- CO 8.1: Maximize the beneficial effects and minimize the adverse effects associated with the siting of major energy facilities. The County will site energy facilities equitably in order to minimize net energy use and consumption of natural resources, and avoid inappropriately burdening certain communities. Energy planning should conserve energy and reduce peak load demands, reduce natural resource consumption, minimize environmental impacts, and treat local communities fairly in providing energy efficiency programs and locating energy facilities.
- CO 8.3: Assist in efforts to develop alternative energy technologies that have minimum adverse effect on the environment, and explore and promote newer opportunities for the use of alternative energy sources.

5.9.3 Environmental Consequences - County Administered Lands

This section contains a discussion of the potential effects of Project Site preparation, Project construction, and Project operation on land uses and land use resources within the Project area in relation to the County of San Bernardino Jurisdictional Authority. Project Site preparation and construction, Project abandonment/closure, and Project operations and maintenance are discussed in Section 3.0, Project Description and Location. Potential cumulative effects are also discussed in Section 5.9.4, Cumulative Effects. Other issues related to land use are addressed in Section 5.2, Air Quality; Section 5.11, Traffic and Transportation; Section 5.12, Noise; Section 5.13, Visual Resources; and Section 5.18, Cumulative Impacts.

Potential environmental consequences were analyzed for the effected environment within the Project area (within 1 mile of the Project Site boundary). Potential land use effects relate to construction, operation, maintenance, and de-commissioning of the Project and its ancillary facilities including associated linears. The potential environmental consequences that relate to land use arise primarily from the conversion of 8,230 acres in the Resource Conservation zone of the San Bernardino General Planning Area from BLM-administered public land use, to solar energy capture and energy conversion apparatus, attendant outbuildings, supporting structures, roadways, and parking lots.

The environmental consequences pertaining to land use for the Project will not affect private lands within the jurisdiction of San Bernardino County. The Project will only involve BLM-

administered public lands under the jurisdiction of the BLM. General land use effects and concerns related to state, CEQA, and Local (General Plan and Development Code) regulations are discussed in this section. Section 5.9.3 discusses effects related to BLM regulations, and land use designations on BLM-administered public lands.

Significant effects would be identified according to CEQA Guidelines if the following effects were established for the Project:

- if the Project would physically divide an established community,
- if the Project would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect, or
- if the Project would conflict with any applicable habitat conservation plan or natural community conservation plan.

Additionally the relevant goals and policies of the San Bernardino County General Plan and Elements, and the Development Code, Title 9, are discussed as they relate to potential effects to land use resulting from the Project.

5.9.4 Existing California Desert Conservation Area Plan and Amendments

Background

The 25-million acre CDCA was designated by Congress in 1976 through the FLPMA. The area, which encompasses portions of the Mojave, Sonoran, and Great Basin Deserts, currently contains approximately 11 million acres of BLM-administered public lands. The 1980 CDCA Plan (as amended)² serves as the land use guide for the management, use, development, and protection of public lands within the CDCA. Public lands within the CDCA are managed based on the concepts of multiple-use, sustained yield, and maintenance of environmental quality. The entire Project Site and linear features would be located on federal lands under the BLM's jurisdiction within the CDCA and would therefore be subject to the provisions of the CDCA Plan (as amended).

The goal of the CDCA Plan is to provide for the use of the public lands and resources of the CDCA, including economic, educational, scientific, and recreational uses in a manner that enhances without diminishing the environmental, cultural, and aesthetic values of the desert and its productivity. This goal is to be achieved through the direction given for management actions and resolution of conflicts outlined in the CDCA Plan. Direction is provided for BLM-administered public lands in four multiple-use classes. The multiple-use classifications describe the type and level or degree of use that is permitted within geographic areas. Further refinement of direction of management of resources within the CDCA is expressed in the goals for each CDCA Plan element (e.g., cultural resources, wildlife, vegetation, wilderness, recreation,

²The CDCA Plan is available on the BLM website at http://www.blm.gov/pgdata/etc/medialib//blm/ca/pdf/pdfs/cdd_pdfs.Par.aa6ec747.File.pdf/CA_Desert_.pdf.

motorized vehicle access, geology, energy production and utility corridors) and in certain site-specific Plan decisions such as ACECs.

Renewable energy development is allowed within the multiple-use class M guidelines of the CDCA Plan.

Affected Areas

The ROWs required for the Project and associated facilities are within areas that are primarily designated as Multiple-Use Class M (Moderate Use), with a small portion of lands designated as Multiple-Use Class L (Limited Use) (see Figure 5.9-1) according to the CDCA Plan (BLM 1980a, as amended), and the 1988 Plan Amendments (BLM 1989), as shown in Table 5.9-2, California Desert Conservation Area Multiple-Use Class Designations for Project Components.

The Multiple-Use Class L designation is intended to protect sensitive, natural, scenic, ecological, and cultural resource values. Public lands designated as Class L are managed generally to provide for lower intensity and carefully controlled multiple-use of resources, while ensuring that sensitive resource values are not significantly diminished.

Multiple-Use Class M (Moderate Use) designation is intended to balance between higher intensity use and protection of public lands. Class M provides for a wide variety of present and future uses such as mining, livestock grazing, recreation, energy, and utility development. Management of Class M Lands is also designed to conserve desert resources and to mitigate damage to those resources which permitted uses may cause.

The CDCA Plan identifies the guidelines (permitted uses) for Class L and M, which may include the Project Features: (1) electric generation facilities, including wind/solar and geothermal, after NEPA requirements are met; new electric transmission facilities within designated corridors, after NEPA requirements are met, (2) new distribution facilities placed within existing ROW where they are reasonably available, and (3) motorized vehicle access and transportation, including new roads developed under ROW grants or pursuant to approved plans of operation.

Table 5.9-2 California Desert Conservation Area Multiple-Use Class Designations for Project Components

Project Component	Bureau of Land Management Multiple-Use Class Designation
Solar One Project Site	M^1, L^2
Transmission line	M^1
Construction laydown area	M^1
Well and Waterline	M^1
Access roads	M^1

Source: BLM, 1980, as amended.

Notes:

¹Originally designated as M (Moderate) by the California Desert Conservation Area Plan (1980),(1989)

²Originally designated as L (Limited) by the California Desert Conservation Area Plan (1980),(1989)

M = Moderate

L = Limited

The Energy Production and Utility Corridors Element of the CDCA Plan (BLM 1980a, as amended) recognize the CDCA as an area where energy production facilities and utility corridors could be located. The element outlines BLM's management decisions for designation and implementation of a network of planning (utility) corridors to meet the projected utility needs through the year 2000 and siting procedures for power plants and alternative energy sources. Although a proposed transmission line may be in a designated corridor, a separate site-specific analysis would be required for all applications for ROW for the transmission line. In addition, implementation decisions outlined in the element indicate that an amendment to the CDCA Plan is required for all power generation facilities.

Sixteen joint-use planning (utility) corridors varying in width from 2 to 5 miles are identified in the CDCA Plan (BLM 1980a, as amended). They are intended to include new electrical transmission lines of 161kV or above, all pipelines with diameters greater than 12 inches, and major aqueducts or canals for inter-basin transfers of water. According to the CDCA Plan, applications for utility ROWs will be encouraged to use designated corridors by BLM management.

5.9.5 Environmental Consequences – BLM-Administered Public Lands

There are no anticipated adverse impacts to land use. According to guidance issued by the BLM California Desert District in 2008 (in response to IM No. 2007-097), an amendment to the CDCA Plan is required for authorization of all power generation facility ROW sited on BLM-administered public lands within the CDCA. As indicated in the CDCA Plan, as amended, "Sites associated with power generation or transmission not identified in the Plan will be considered through the Plan Amendment process." Because BLM cannot provide the approvals necessary for Solar One to demonstrate "site control" until after this process has concluded, "site control" would take place concurrently with the CEC's consideration of the Project for certification.

5.9.5.1 Bureau of Land Management Land Use Plan Amendment

This section describes the BLM land use plan amendment to the CDCA Plan that would be required to accommodate the Project, as outlined by the FLPMA BLM planning regulations (43 CFR 1600). As a component of the ROW grant permitting procedure, the Project may require an amendment to BLM's CDCA Plan (BLM 1980a, as amended). An overview of the existing CDCA Plan is provided in Section 5.9.3.3, Effects of the Project on the CDCA Plan, and includes discussion of any policy inconsistencies with the CDCA Plan and its amendments. A discussion of the amendment that would be required for the Project and a discussion of processes and regulations that require the amendment are provided in Section 5.9.3.4, CDCA Plan Amendments Required for the Project.

5.9.5.2 Effects of the Project on the California Desert Conservation Area Plan

The Project is not anticipated to cause any adverse effects to land use within the CDCA. Compliance of the Project and its related linear facilities with CDCA Plan Multiple-Use Class M and L designations is shown in Table 5.9-3, Conformance with California Desert Conservation

Area Plan Multiple-Use Class M and L Designations. Because solar electric facilities are allowed under Multiple-Use Class M and L designations, the Project would be in comformance with use class designations.

Table 5.9-3
Conformance with California Desert Conservation Area Plan
Multiple-Use Class Designation

Project Component	Compliance with Multiple-Use Class Designation
Solar One Project Site	In compliance; the Multiple-Use Class M and L designations provide opportunity for development of a solar electric generation facility after NEPA requirements are met. However, future management as Class I would be more appropriate for the proposed facility.
Transmission line	In compliance; the transmission line would be located within the Project Site, except for 750 feet which would be located within the existing right-of-way for the Lugo-Pisgah Line.
Access road	In compliance; the proposed access road would be developed under the Project right-of-way grant.

Source: Stirling Energy Systems, 2008.

Notes:

kV = kilovoltM = Moderate

NEPA = National Environmental Policy Act of 1969

A portion of the Project Site would be located on BLM-administered public land within designated Utility Corridor "G." The proposed transmission line would be co-located parallel to the existing Lugo-Pisgah No. 1 Transmission Line located within designated Utility Corridor "G." The width of corridor "G" as designated under the CDCA Plan is 2 to 5 miles wide. Approximately 2,445 acres of land to be included in the fenced boundary of the Project Site would be located inside designated Utility Corridor "G." The siting of the Project within the 2-to 5-mile wide utility corridor would reduce the width of the corridor available for linear transmission facilities at the Project Site, effectively narrowing the width of Utility Corridor "G" at the Project Site by precluding future ROWs from occupying the Project Site.

The CDCA Plan (BLM 1980a, as amended) states that the same criteria used for determining decisions within the CDCA Energy Production and Utility Corridors Element would also be used to evaluate applications for specific electrical ROW or power plant sites. The Project's conformity with the CDCA Plan's Energy Production and Utility Corridors Element Decision Criteria is shown in Table 5.9-4, Conformity with the CDCA Area Plan's Energy Production and Utility Corridors Element Decision Criteria.

Table 5.9-4 Conformity with the California Desert Conservation Area Plan's Energy Production and Utility Corridors Element Decision Criteria

Decision Criteria	Compliance
	Linear facilities associated with the Project would be co-located with existing rights-of-way, The 1.00-mile long 220kV transmission line would parallel the Project Site and join the existing Lugo-Pisgah T-line.

Table 5.9-4 Conformity with the California Desert Conservation Area Plan's Energy Production and Utility Corridors Element Decision Criteria

Decision Criteria	Compliance
Encourage joint use of corridors for transmission lines	The 1.00-mile long 220kV transmission line would parallel the existing 500kV transmission line to the Pisgah Substation within designated Utility Corridor "G".
Provide alternative corridors to be considered during processing of applications	Alternative site locations were considered during the planning process and are discussed in Section 4.0, Alternatives.
Avoids sensitive resources whenever possible	The Project would avoid sensitive biological and cultural resources whenever possible, as discussed in Section 5.6, Biological Resources, and Section 5.7, Cultural Resources.
Conforms to local plans whenever possible	This section discusses the Project's conformance to BLM land use plans. The plan is in compliance with state and local land use plans (refer to Section 5.9.6, Laws, Ordinances, Regulations, and Standards Compliance, for additional information on conformance with local and state plans).
Considers wilderness values consistent with wilderness designations	The Project would not conflict with wilderness designations or wilderness values.
Completes delivery systems network	Not applicable
Considers ongoing projects for which decisions have been made	The Project will be co-located parallel to the existing Lugo-Pisgah Transmission Line corridor.
Considers corridor networks which take into account power needs and alternative fuel resources	Project would provide alternative fuel.

Source: Stirling Energy Systems, 2008. BLM = Bureau of Land Management

kV = kilovolt

In addition, the Utility Corridors Element states that the BLM focuses on the same factors affecting public lands and their resources as those used by the CEC (for siting all power plants with a capacity greater than 49MW), which includes (1) conformance with the CDCA Plan, including the designation of proposed planning corridors, (2) protection of air quality, (3) effect on adjacent wilderness and sensitive resources, (4) visual quality, (5) fuel sources and delivery systems, (6) cooling water source(s), (7) waste disposal, (8) seismic hazards, and (9) regional equity. This section serves to address consistency with the CDCA Plan. Items 2 through 9 are discussed in Section 5, Environmental Information.

The ACECs and Special Areas Element of the CDCA Plan (BLM 1980a, as amended) designated 72 ACECs and three areas of additional outstanding values to address lands with unique characteristic or values that set them apart. The proposed transmission line associated with the Project would not traverse ACECs, within designated Utility Corridor "G." However, a temporary construction access road is proposed via Pisgah Crater Road. This route would traverse 3.5 miles of the Pisgah ACEC. Currently the road exists, but the Project would widen the road to 30 feet so that construction vehicles could utilize the road for site access. The road is

currently within Utility Corridor "G" and does not deviate more than a mile to either side of the I-40. Because it is an existing road and within a Utility Corridor and temporary, no permanent land use impacts are expected to occur as a result of the widening and use. Temporary impacts to land use are not expected, unless the proposed widening affects management of biological resources within the Pisgah ACEC. Please refer to Section 5.6, Biological Resources for a discussion of impacts to management of biological resources within Pisgah ACEC and mitigation measures that address the temporary access. After the project is completed the road will be restored to its previous state. The management plan does not preclude energy development, which could be developed if environmental analysis demonstrates that it is environmentally sound to do so.

The Project Site is within the West Mojave Plan area. The purpose of the 2004 West Mojave Plan (BLM 2004), CDCA Plan Amendment is to develop management strategies for the desert tortoise, Mojave ground squirrel, and over 100 other sensitive plants and animals that would conserve those species throughout the western Mojave Desert, while at the same time establishing a streamlined program for compliance with the regulatory requirements of Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA).

The West Mojave Plan States that undeveloped lands in the planning area are, "available for future recreation areas and for developments such as mining or energy production that can be pursued in remote areas." Furthermore, Chapter Section 3.6.1 specifically identifies the region in which the Project is proposed as an important area for the development of solar energy facilities. "The southwestern United States is one of the world's best locations for solar energy production with the desert region receiving almost twice the sunlight as other regions in the United States. Major solar energy facilities have been developed in the Daggett area, at Kramer Junction and at Harper Dry Lake."

The goals of the West Mojave Plan are to develop energy resources in an environmentally sound manner and to reduce effects from electrical transmission lines and access roads.

The Project is consistent with the West Mojave Plan because the Project would provide responsible alternative energy development within undeveloped areas of Multiple-Use Class M and L lands, and the proposed transmission line would parallel the existing Lugo-Pisgah transmission line within designated Utility Corridor "G," thus minimizing disturbance to sensitive resources within the plan area.

The CDCA Plan designates areas as "open," "limited," or "closed" to motorized-vehicle access in order to provide recreational opportunities and protection of resources in appropriate areas. Areas designated "open" provide opportunities for OHV use and enjoyment of public lands by permitting vehicular travel anywhere within the area. Vehicle travel is not allowed in areas that are designated "closed" to motorized-vehicle use. There are no areas designated "open" or "closed" to OHV use in the Project Site, and thus the Project would not restrict OHV recreational uses in "open" areas or pose a threat to sensitive resources in areas that are located in "closed" areas. The Project would be located in areas designated for "limited" motorized-vehicle access, which means that motorized-vehicles are currently allowed only on certain routes of travel, which include roadways, trails, and natural drainages.

A major result of the Project would be the elimination of other potential uses on the BLM-administered public lands (e.g., recreation, travel, etc.). Existing designated open routes would

be terminated at the Project Site boundary, and would not be available for public use, this could improve protection of the Cady Mountain WSA by restricting potential unauthorized uses. The 2003 Western Colorado Desert Routes of Travel Designations Plan Amendment and Environmental Assessment (EA) (BLM 2003b) established site-specific route designations based on the CDCA Plan. The CDCA Plan Amendment updated previous route designations and existing routes on approximately 475,000 acres with limited use of OHVs and approximately 2,320 miles of OHV routes in San Bernardino County. The approved plan amendment creates a route network that balances the need to conserve natural and cultural resources while providing for OHV recreational opportunities and other access needs throughout the Project area.

The plan provides a network of routes of travel as open and available for all types of vehicles on the Project Site. Portions of Hector Road located within the Project Site would be closed to public use as a result of approval of the Project. Long-term permanent access would be provided by a bridge over the BSNF railroad along Hector Road north of I-40. Equipment may be transported during construction via trucks and/or railroad (through the construction of a siding), that would be located on the north side of BNSF railroad and east of Hector Road. Additionally, temporary access will be required along the Pisgah transmission line ROW, within the "G" utility corridor to the east of the Project Site. It is proposed that temporary access would be via the existing Pisgah Crater Road, County Road 20795. Construction equipment would run approximately 3.5 miles across the Pisgah ACEC requiring an approximate 30-foot ROW. Since the temporary access is to be located on an open route (via Pisgah Crater Road), within the utility corridor, it is not expected to cause any lasting adverse effect to land use. According to the CDCA Plan, as amended, the existing road is located in an area designated Multiple Use Class M. The proposed use, a temporary access road, is consistent with this classification.

One of the Project's access roads would provide opportunities for emergency access in the area. The Project will maintain access to private parcels located inside the Project boundary. Some small roads will have to be constructed from the existing transmission line access road to the new transmission line towers.

5.9.5.3 CDCA Plan Amendments Required for the Project

Regulatory Requirements

Section 202 of the FLPMA states: "The Secretary shall, with public involvement .. develop, maintain, and when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands" (43 United States Code [USC] 1712). The regulations for making and modifying land use plans and planning decisions are found in Title 43 of the CFR Part 1600. A proposed land use plan amendment is to follow the regulations as set forth in Title 43 CFR Part 1610, Resource Management Planning, which requires that an interdisciplinary approach be taken in amending resource management plans (RMPs), where the disciplines of the preparers shall be appropriate to the values involved and the issues identified for the amendment. The amendment is to be analyzed through the NEPA process, in which the public and federal, state, and local governments are to be provided opportunities to meaningfully participate in and comment on the preparation of the amendment and be given early notice of planning activities. The analysis and public involvement for the land use plan amendment coincides, to the extent possible, with the public notices, hearings, and comment periods of the Staff Analysis/EIS.

The land use plan amendment and identification of major issues are discussed and analyzed within the technical resource sections of this AFC. Potential effects and mitigation measures resulting from the land use plan amendment, if required, are evaluated and discussed relevant to each technical resource area.

The Record of Decision will address the joint Staff Analysis/EIS document, including both the land use plan amendment under the BLM planning regulations, and the Project under the BLM ROW regulations and NEPA.

Because the Staff Analysis/EIS also evaluates a BLM draft land use plan amendment, the public review period will last 90 days from the date the Notice of Availability of the draft EIS is published in the Federal Register (43 CFR 1610.2). Approval of the proposed revisions to the CDCA Plan (as outlined in Chapter 7 of the CDCA Plan, as amended) and of the necessary ROW required for the Project would be approved by the California State Director.

The planning regulations include an opportunity for protest (43 CFR 1610.5-2). The protest period extends 30 days from the date that the Environmental Protection Agency (EPA) publishes the Notice of Availability of the final EIS containing the amendment in the Federal Register. A letter of protest must be filed with the BLM Director within 30 days of the EPA notice. The Director may dismiss or uphold a protest, in whole or in part. The BLM will withhold approval and implementation on any protested portion of a plan amendment until the protest process has been completed. Portions of the plan amendment not being protested may be approved and implemented.

EPA's notice simultaneously initiates the Governor's consistency review. The Governor has a maximum of 60 days to identify inconsistencies between the proposed plan and state and local plans and provide written comments to the BLM California State Director. The BLM and the state may mutually agree upon a shorter review period satisfactory to both parties.

Once protests have been resolved and the Governor's consistency review has been completed, the BLM State Director may approve the plan amendment by signing a record of decision. The plan amendment decision of the BLM State Director is the final decision of the U.S. Department of the Interior and therefore cannot be appealed to the Interior Board of Land Appeals. However, the BLM's approval of the ROW grant to authorize the Project can be appealed to the Interior Board of Land Appeals.

This AFC has been prepared to facilitate review by CEC staff in accordance with CEQA, and to request approval by the CEC for construction and operation of the Project. This AFC has been prepared in accordance with the MOU between the U.S. Department of the Interior, BLM, California Desert District, and the CEC staff Concerning Joint Environmental Review for Solar Thermal Power Plant Projects.

Construction of the Project will require access to approximately 8,230 acres of BLM-administered public land; therefore, under federal law, BLM is responsible for processing the ROW requests to authorize the Project, associated transmission lines, and other appurtenant facilities. In processing the ROW applications, BLM must comply with the requirements of NEPA, which requires that federal agencies reviewing projects under their jurisdiction consider the environmental effects associated with their construction and operation.

Need for Plan Amendment

Instruction Memorandum (IM) No. 2007-097 (Solar Energy Development Policy), issued by the BLM in April 2007, established the policy for the processing of ROW applications for solar energy development projects on public lands administered by the BLM. IM No. 2007-97 states that commercial concentrating solar power electric generating facilities must comply with the BLM's planning, environmental, and ROW application requirements. According to guidance issued by the BLM California Desert District in 2008 (in response to IM No. 2007-097), an amendment to the CDCA Plan is required for authorization of all power generation facility ROW sited on BLM-administered public lands within the CDCA. As indicated on page 95 of the CDCA Plan, as amended, "Sites associated with power generation or transmission not identified in the Plan will be considered through the Plan Amendment process."

The ROW needed for the Project effectively precludes other uses of the lands and resources subject to the ROW for at least the term of the ROW and may extend to the time needed to reclaim the lands disturbed. Although linear facilities (alternate access road and transmission line) may be compatible with other land uses, the amount of land to be fenced and developed (estimated to be approximately 8,230 acres) would preclude the use of access and transportation routes within the fenced portion.

The Project is anticipated to require the reclassification of the Project Site from Class M (Moderate) and Class L (limited), to Class I (Intensive), which would provide the appropriate reclassification for the higher intensity energy development use along with protection of public lands. According to the CDCA Plan, as amended, the purpose of the Class I designation is to provide for a concentrated use of lands and resources to meet human needs, while providing reasonable protection for sensitive natural and cultural values (BLM 1980a, as amended). Proposed revisions of the CDCA Multiple-Use Class Designations are approved by the BLM California State Director according to the Plan amendment procedures outlined in Chapter 7 of the CDCA Plan (1980a, as amended).

The Project Site may block public access or use of previously used routes that were designated open through the BLM's route designation process (access to private parcels located within the Project Site boundary will be maintained). Loss of access across public lands would limit travel, recreational opportunities, and emergency vehicular access in the vicinity of the Project.

Plan Amendment Process

The Plan Amendment Process is outlined in Chapter 7 of the CDCA Plan (BLM 1980a, as amended). All requests for amendments must be submitted to the District Manager of the California Desert District. Any requests from individuals or private groups or organizations for amendments to or changes in the CDCA Plan must contain the following information: (1) reasons for the request and (2) an explanation of how the individual group, or organization is being adversely affected by existing requirements or management objectives in the Plan. A land use plan amendment is required for authorization of all power generation facility ROWs sited on BLM-administered public lands within the CDCA. Amendment of the CDCA Plan is an action that may be necessary for construction of the Project.

In analyzing this request for amending the CDCA Plan (BLM 1980a, as amended), the BLM District Manager, Desert District, will (1) determine if whether the request has been properly

submitted and if any law or regulation prohibits granting the requested amendment, (2) determine if whether alternative locations within the CDCA are available that would meet the applicant's needs without requiring a change in the Plan's classification, or an amendment to any Plan element, (3) determine the environmental affects of granting and/or implementing the applicant's request, (4) consider the economic and social effects of granting and/or implementing the applicant's request, (5) provide opportunities for and consideration of public comment on the proposed amendment, including input from the public and from federal, state, and local government agencies, and (6) evaluate the effect of the proposed amendment on BLM management's desert-wide obligation to achieve and maintain a balance between resource use and resource protection.

5.9.6 Cumulative Effects

The development of the Project combined with the development of other large-scale proposed wind and solar projects could potentially result in significant cumulative effects to regional area land use and may represent a shift in predominant land use within the regional area depending upon the extent of renewable energy development.

Currently there are applications for ROWs for solar and wind power facilities in the Project vicinity (see Section 5.18, Cumulative Impacts). Specifically the Solar Three project represents a substantial increase in area used for solar energy generation proposed in the immediate vicinity. However, given the land use considerations for the Solar Three Project are nearly identical to those for the Solar One Project, it is not expected to cause adverse cumulative impacts to land use.

The areas proposed for other solar or wind power facility ROWs in the vicinity of the Project represent a large area of desert land running through the Mojave Valley. Depending upon the multiple use class of the other projects' sites, they may or may not be allowed uses. Assuming they are allowable uses under BLM regulations, the conversion of large amounts of the CDCA from Resource Conservation uses to energy conversion facilities would approach a threshold that would signal a level of cumulative effect. However, the level at which conversion of moderate use BLM lands to renewable energy generation would become an adverse cumulative impact is not yet determined and is expected to be addressed in the forthcoming Programmatic Environmental Impact Statement (EIS) prepared by BLM for large scale solar developments.

Although there are other projects of predominant size and scale proposed within the Project's vicinity, there is not enough information available about other projects' features and size to anticipate the extent of any significant cumulative effect that would be caused in relation to land use.

If all of the ROW permits were granted and large-scale solar and wind power facilities were built in all of the proposed areas, there is the potential for significant impacts to the recreational opportunities and resources of the impacted and surrounding BLM lands. The impacts would result specifically from the cumulative effects of a succession of intensive development in an area that has historically been left to open space and recreation. Due to the size and scale of Solar One, and the location of Solar One next to I-40, the nature of any cumulative effect will be highly related to visual resources (see Section 5.13, Visual Resources). This is a prominent

location and the existence of wind and solar power facilities will dominate the character of land use in the area at the foot of the Cady Mountains once the Project has been built.

Existing projects within the study area are few and unrelated to power generation (i.e., new single-family dwellings and mobile homes), with the exception of the proposed expansion of the Twentynine Palms military base, discussed in detail in Section 5.18, Cumulative Impacts. There are no permitted projects in the construction phase that are within the Project study area that would have a cumulative effect when combined with the Project. Existing projects include typical minor construction projects such as manufactured and mobile home permits, mobile home foundations, carport additions, roof replacements, deck additions, and residential renovations. Cumulative impacts to land use are not currently anticipated as a result of the construction, operation, maintenance, or long-term presence of the Project. However, if other large-scale renewable energy projects are permitted, Solar One would represent a prominent incremental effect of a shift in regional land use. For further discussion of cumulative impacts, see Section 5.18, Cumulative Impacts.

5.9.7 Mitigation Measures

Operational impacts to land use are not expected to be adverse. The Project is in support of the goal of the California Renewable Portfolio Standard to achieve 20 percent of the energy portfolio from renewable sources. While the proposed use would alter the character of the land use at the site, the proposed use is classified as a Permitted Use according to BLM Multiple use Class M and L, and subject to a CUP according to the Planning Department of San Bernardino County, and the Project will not interfere with surrounding land use and development. Access will be provided to the private parcels located within the project boundary as NAP. Therefore, no mitigation measures relating to land use controls are recommended at this time.

The Project would permanently change the nature of land use at the Project Site from Open Space Limited Use zoned for Resource Conservation, to a facility for the generation of renewable power. The Project is in compliance with the goals, policies, and zoning ordinances of the County as proscribed in the San Bernardino County General Plan and the provisions of the Development Code (San Bernardino County 2007). However, the Project Site is comprised of BLM-administered public land and is managed under the CDCA Plan. Compliance with land use designations at the Project Site would require an amendment to the CDCA. For a discussion of the BLM amendment process see Section 5.9.3.1, Bureau of Land Management Land Use Plan Amendment.

The construction and operation of the Project does not diminish San Bernardino County's farmland. No Williamson Act lands would be jeopardized. The soils of the Project Site are not suitable for crop production. In addition, the Project would present an opportunity to develop a portion of the vast sources of renewable energy available in the Mojave Valley. Construction impacts are expected to be less than significant after mitigation outlined in other resource areas.

5.9.8 Compliance with LORS

State and local laws, ordinances, regulations, and standards (LORS) that are related to land use and their applicability to the Project are summarized in Table 5.9-5, Summary of LORS – Land

Use. The Project would be constructed and operated in compliance with all applicable land use LORS.

Table 5.9-5 Summary of LORS – Land Use

LORS	Applicability	Conformance Section
Federal Jurisdiction		
National Environmental Policy Act of 1969/Bureau of Land Management	NEPA establishes a public, interdisciplinary framework for federal decision-making and ensures that agencies (BLM and all other agencies) take environmental factors into account when considering federal actions.	Section 5.9.4, 5.9.5
The Federal Land Policy and Management Act of 1976/Bureau of Land Management	This BLM-specific law provides direction for land use planning, administration, range management, right-of-way, designated management areas (including specific locations and general designation of wilderness areas), and effects on existing rights.	Section 5.9.4, 5.9.5
California Desert Conservation Area (CDCA) Plan/Bureau of Land Management	The management principles contained in the law FLPMA are achieved through the implementation of the CDCA Plan.	Section 5.9.5.9.4
State Jurisdiction		
Memorandum of Understanding between the United States Department of Interior, Bureau of Land Management California Desert District and the California Energy Commission Staff	Comply with the BLM and CEC Combined EIR/EIS Process.	Section 5.9.1
California Public Resources Code *25523 (a): 20 CCR **1752, 1752.5, 2300-2309, and Chapter 2, Subchapter 5, Appendix B, Parts (1) (3) and (4)	Evaluate compatibility of the Project with relevant land use plans.	Section 5.9.4, 5.9.5
California State Planning Law, Government Code Sections 65300 through 65302	Requires each city and county to adopt a comprehensive, general plan for the physical development of the county or city. Requirements identify contents of General Plan. San Bernardino County has adopted a General Plan.	Section 5.9.2, 5.9.3
California State Planning Law, Government Code Sections 51200 through 51207 (Williamson Act)	Enables local governments to enter into contracts with private landowners to restrict specific parcels of land to agricultural or related open space use. Landowners receive property tax assessments much lower than normal because they are based upon farming and open space uses as opposed to full market value.	Section 5.9. 1

Table 5.9-5 Summary of LORS – Land Use

LORS	Applicability	Conformance Section
Local Jurisdiction		
San Bernardino County General Plan, Conservation Element Policy 6.3, Program 1	Utilize the provisions of the Williamson Act to further the preservation of commercially viable agricultural open space and designate preserves on the Land Use Policy Maps.	Section 5.9.2
San Bernardino County General Plan, Land Use Element	Serves as a guide for the County of San Bernardino's future development. It designates the distribution and general location of land uses, such as residential, retail, industrial, open space, recreation and public areas. It also addresses the permitted density and intensity of the various land use designations.	Section 5.9.2
San Bernardino County General Plan, Land Use Element	Policy 4.1- Protect areas best suited for industrial activity by virtue of their location and other criteria from residential and other incompatible uses.	Section 5.9.2
	Goal 7- The distribution of land uses will be consistent with the maintenance of environmental quality, conservation of natural resources, and the preservation of open spaces.	Section 5.9.2
	Goal 9- Development will be in a contiguous manner as much as possible to minimize environmental impacts, minimize public infrastructure and service costs, and further countywide economic development goals.	Section 5.9.3
	Goal 11- Promote mutually beneficial uses of land to address regional problems through coordination and cooperation among the County, the incorporated cities, Southern California Association of Governments (SCAG), San Bernardino Associated Governments (SANBAG), the various special districts and other local, state and federal agencies.	Section 5.9.2
	Policy 11.1- Foster intergovernmental cooperation among federal, state and local agencies on key land use decisions.	Section 5.9.2

Table 5.9-5 Summary of LORS – Land Use

LORS	Applicability	Conformance Section
	Policy 11.2- Establish a "review area" around each state, military, or other federal installation, and review development proposals within each review area with the appropriate agency.	Section 5.9.2
	Policy 11.3- Work with the Bureau of Land Management (BLM), U.S. Forest Service, the U.S. Park Service, and other public agencies to eliminate conflicts between public and private lands, and to designate and protect wilderness and restricted natural areas.	Section 5.9.2
San Bernardino County General Plan, Land Use Element-Desert Region	Goal 1- Maintain land use patterns in the Desert Region that enhance the rural environment and preserve the quality of life of the residents of the region.	Section 5.9.3
	Policy 3.1- Ensure that commercial and industrial development within the region is compatible with the rural desert character and meets the needs of local residents.	Section 5.9.6.3
San Bernardino County Development Code 82.06.060 Industrial and Special Purpose Land Use Zoning Site Planning and Building Standards	Subdivisions, new land uses and structures, and alterations to existing land uses and structures, shall be designed, constructed, and established in compliance with these requirements.	Section 5.9.2
San Bernardino County Development Code 83.01.020 General Performance Standards	Performance standards for development within the county that promotes compatibility with surrounding areas and land uses. Performance standards are designed to mitigate the environmental impacts of existing and proposed land uses within a community.	Section 5.9.2
San Bernardino County Development Code 83.01.050 Electrical Disturbances	No activity, land use, or process shall cause electrical disturbance that adversely affects persons or the operation of equipment across lot lines and that does not conform to the regulations of the Federal Communications Commission.	Section 5.9.2

Table 5.9-5 Summary of LORS – Land Use

LORS	Applicability	Conformance
		Section

Source: BLM, 1980b, as amended; San Bernardino County, 2007a

Notes:

BLM = Bureau of Land Management
CEC = California Energy Commission
EIR = Environmental Impact Report
EIS = Environmental Impact Statement

FLPMA = Federal Land Policy and Management Act of 1976 LORS = laws, ordinances, regulations, and standards NEPA = National Environmental Policy Act of 1969

5.9.8.1 Federal

National Environmental Policy Act of 1969

NEPA establishes a public, interdisciplinary framework for federal decision-making and ensures that agencies (BLM and all other agencies) take environmental factors into account when considering federal actions. NEPA mandates that each agency develop procedures for implementing the basic NEPA requirements. The agencies' procedures are adopted as federal regulations after input from the public and approval of the Council on Environmental Quality. Agencies can also develop policy to complement their regulations.

NEPA requires agencies to follow a three-step review process, as listed below.

- 1. Conduct a preliminary screening for NEPA's applicability (NEPA is not required for proposed actions that are considered "categorical exclusions," for example).
- 2. Prepare an EA to determine whether an EIS is required.
- 3. Prepare an EIS if required (an EIS is required if a proposed action may "significantly affect the quality of the human environment").

For BLM, developing or revising an RMP automatically requires an EIS. Amending an RMP requires an EA and may or may not require an EIS.

The Federal Land Policy and Management Act of 1976

This BLM-specific law provides direction for land use planning, administration, range management, ROW, designated management areas (including specific locations and general designation of wilderness areas), and effects on existing rights.

The FLPMA does set forth critical planning requirements such as:

- observe principles of multiple-use and sustained yield,
- use a systematic interdisciplinary approach (physical, biological, economic, cultural),
- give priority to the designation of ACECs, are areas in which special management attention is required to *protect and prevent irreparable damage* to important historic, cultural, or

scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards),

- rely on inventories of the public lands and their resources,
- consider present and potential uses,
- consider the relative scarcity of the values and alternatives for realizing those values,
- weigh long- vs. short-term benefits,
- comply with pollution control laws, and
- coordinate with other federal, state, tribal and local government entities.

California Desert Conservation Act

The management principles contained in the law (FLPMA) are achieved through the implementation of the CDCA Plan. The specific intent of the CDCA Plan is to recognize that the California Desert is a precious public resource, and to effectively guarantee its management so that the uses of today do not preclude the users of tomorrow, and that the assets of the CDCA are preserved and developed wisely with full regard for their social, environmental, and economic values. The BLM manages the CDCA to include economic, educational, scientific, and recreational use, in a manner which enhances and does not diminish the environmental, cultural, and aesthetic values of the California Desert and its productivity.

The Plan assures that use of the public lands and resources contained within the CDCA upholds the management principles proscribed by the FLPMA. These management principles include: multiple-use, sustained yield, and the maintenance of environmental quality. The BLM shall achieve the principles and goals of the CDCA through the direction given for management actions and resolution of conflicts. Direction is stated first on a geographic basis, in the guidelines for each of the four multiple-use classes. Within those multiple-use class guidelines further refinement of direction is expressed in each Plan element. Direction is also expressed in certain site-specific Plan decisions such as Areas of Critical Environmental Concern (ACECs).

5.9.8.2 State

California Public Resources Code *25523 (a); 20 California Code of Regulations (CCR) ** 1752, 1752.5, 2300-2309, and Chapter 2, Subchapter 5, Appendix B, Part (1), (3) and (4)

These codes require that the applicant evaluate the compatibility of the Project with relevant land use plans. The administering agency for the above is the CEC. This requirement is met via Section 5.9.1, Affected Environment, and Section 5.9.2.1, Project Details.

California State Planning Law, Government Code Sections 65300 through 65302

This code requires each planning agency to prepare, and the legislative body of each county and city to adopt, a comprehensive general plan for the physical development of the county. The plan shall address seven mandatory elements, including a land use element. The administering agency for these state requirements is San Bernardino County.

California State Planning Law Government Code Sections 51200 through 51207 California Land Conservation Act (Williamson Act)

The California Land Conservation Act was passed in 1965 to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Act creates an arrangement whereby private landowners' contract with counties and cities to voluntarily restrict land to agricultural and open-space uses. The vehicle for these agreements is a rolling term 10-year contract (i.e., unless either party files a "notice of non-renewal," the contract is automatically renewed annually for an additional year). In return, landowners receive property tax assessments much lower than normal because they are based on the lowest of three values; Williamson Act restricted value, current market value, or factored base year value. Restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value.

The administering agency for these state requirements is San Bernardino County. None of the parcels considered for the Project Site are currently under contract pursuant to the Williamson Act, nor are they considered farmlands of statewide importance by the state of California.

5.9.8.3 Local

The San Bernardino County General Plan, Land Use Element, initially adopted in June 1989 and most recently revised in March 2007, reflects the vision and contains the goals of the County with respect to development. The Land Use Element designates the distribution and general location of land uses such as residential, retail, industrial, open space, recreation and public areas. The main purpose of the Land Use Element is to identify the goals, policies and standards of the San Bernardino General Plan that will guide the physical growth of San Bernardino County.

General Plan Policy and Zoning Designation

The Project is in accordance with the policies of the San Bernardino County General Plan (2007) and zoning designations at the Project Site. The privately owned portions of the Project Site are designated S-2 Open Space and the proposed use has been an allowable use in the S-2 Zone according to the San Bernardino County Land Use Services Department. The Project must comply with the provisions of the General Plan Elements discussed here.

5.9.8.4 Agencies and Agency Contacts

Table 5.9-6, Agency Contact List for LORS, provides the agency contacts for relevant LORS.

Table 5.9-6 Agency Contact List for LORS

Agency	Contact	Address	Telephone
San Bernardino County Department of Planning and Building		Department of Community Development and Housing 290 North "D" Street, Sixth Floor San Bernardino, CA 92415-0040	(909) 388-0800
San Bernardino County Department of Planning and Building	Loretta Mathieu	Department of Community Development and Housing 290 North "D" Street, Sixth Floor San Bernardino, CA 92415-0040	(909) 388-0800
Bureau of Land Management	Richard Rotte	Bureau of Land Management Barstow Field Office 2601 Barstow Road Barstow, CA 92311	(760)252-6000 (760)252-6098

Source: San Bernardino County, 2008b.

Note:

LORS = laws, ordinances, regulations, and standards

5.9.8.5 Permits Required and Permitting Schedule

Table 5.9-7, Applicable Permits, provides the responsible agencies for the required permits/approvals.

Table Applicable Permits

5.9-7

Responsible Agency	Permit/Approval	Schedule
San Bernardino County	Conditional Use Permit –	To be announced
	Energy Generation Overlay	
Bureau of Land Management	Amendment to California Desert	12 months
	Conservation Area	
California Energy Commission	Certification	12 months

Source: San Bernardino County Department of Planning and Building, 2008.

5.9.9 References

BLM (Bureau of Land Management). 198 1980. Riverside, California. Amended 20	0a. California Desert Conservation Area Plan of 003.
1980b. California Desert Conservation	on Area Plan of 1980, as amended. Riverside, CA.
2003. West Mojave Plan.	
1989. 1988 Plan Amendments to the	e California Desert Conservation Area Plan of 1980
Decision Record.	

2002. Environmental Assessment and Draft Plan for Western Colorado Desert Routes of Travel Designation. El Centro Field Office.
2003a. Environmental Assessment, Plan Amendment, Finding of No Significant Impact, Decision Record for the Adoption of the Flat-tailed Horned Lizard Rangewide Management Strategy.
2003b. Western Colorado Desert Routes of Travel Designations Plan Amendment and Environmental Assessment.
2007. Development Code. San Bernardino County, California.
2007b. Instruction Memorandum (IM) No. 2007-097, Solar Energy Development Policy. Washington Office.
2008. Guidance for Processing Applications for Solar Power Generation Facilities on Bureau of Land Management Administered Public Lands in the California Desert District.
San Bernardino County. 2007. San Bernardino County General Plan, San Bernardino County, California.
2007. Conservation Element. San Bernardino County, California.
General Plan. 2008b. San Bernardino County, California.
2008e. San Bernardino County website; http://www.sbcounty.gov/
San Bernardino County Department of Planning and Building. 2008. Personal communication with Loretta Mathieu and Keri Hyke. November 2008.
SES Solar Three, LLC and SES Solar Six, LLC. 2008. Project Description and Plan of Development (October 2008).

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Adequacy Issue:	Adequate	Inadequate	DATA	ADEQUACY WORKS	SHEET	Revision No.	0	Date	
Technical Area:	Land Use		Project:	SES Solar One	Technical St	aff:			
Project Manager:			Docket:			Technical Se	enior:		
SITING REGULATIONS	INFORMATION			AFC Section Number	ADEQUATE YES OR NO	INFORMATION AFC CONFO			
Appendix B (g) (1)	conditions, the cumulative impoperation and measures programmental effectiveness cany monitoring	iscussion of the expected direct pacts due to the maintenance of the proposed to mit impacts of the proposed proposed to plans proposed the mitigation.	et, indirect and e construction, the project, the igate adverse e project, the measures, and	Section 5.9 Section 5.9.1 Section 5.9.1.1 Section 5.9.1.2 Section 5.9.2 Section 5.9.2.1 Section 5.9.2.2 Section 5.9.2.3 Section 5.9.2.4 Section 5.9.2.5 Section 5.9.3 Section 5.9.3.1 Section 5.9.3.2 Section 5.9.3.2 Section 5.9.4					Samono
Appendix B (g) (3) (A)	zoning at the patterns within and within on	of existing land uses one mile of the capital and uses one mile of the capital and the capital	and land use proposed site	Section 5.9.1 Section 5.9.1.1 Section 5.9.1.2 Section 5.9.4.4					
Appendix B (g) (3) (A) (i)	An identification industrial, reconstruction, education, education	on of residential creational, scenice protection, nacational, religious and any other	c, agricultural, atural resource s, cultural, and	Section 5.9.1 Section 5.9.1.1 Section 5.9.1.2 Section 5.9.2 Section 5.9.2.1 Section 5.9.2.2 Section 5.9.3 Section 5.9.3.1 Section 5.9.3.2 Section 5.9.3.3 Section 5.9.3.3 Section 5.9.3.4					

Adequacy Issue:	Adequate	Inadequate	DATA	ADEQUACY WORKS	Revision No.	0	Date		
Technical Area:	Land Use	1	Project:	SES Solar One		Technical St	aff:		ı
Project Manager:			Docket:			Technical Se	enior:		
SITING REGULATIONS	INFORMATION			AFC Section Number	ADEQUATE YES OR NO	INFORMATION AFC CONFO			
Appendix B (g) (3) (A) (ii)	changes and noticed by a	of any recent or of sile of any recent or of sile of any sile of apport of any or similar entity at the sile of any of the sile of any of the sile of any of	amendments; pointed board,	Section 5.9.2.1 Section 5.9.2.2					
Appendix B (g) (3) (A) (iii)	public agencie months prior	of all discretiona es initiated or comp to filing the applic developments)(3)(A)(ii); and	pleted within 18 ation for those	Section 5.9.1.2					
Appendix B (g) (3) (A) (iv)	subsection (g project, on jurisdictional designations,	s of the areas (3)(A) potentially a which existing boundaries, c specific plan despecn clearly delinea	affected by the land uses, general plan signations, and	Figure 5.9-2 Figure 5.9-3					

Adequacy Issue:	Adequate	Inadequate	DATA	ADEQUACY WORKS	SHEET	Revision No. 0	Date	
Technical Area:	Land Use		Project:	,		Technical Staff:		•
Project Manager:			Docket:			Technical Senior	:	
SITING REGULATIONS	INFORMATION			AFC Section Number	ADEQUATE YES OR NO	INFORMATION RE		
Appendix B (g) (3) (B)	proposed projland uses, and land use plan regional, or discussion shalland use decis as part of the be necessary adopted federa plans, land use Examples of general plan a line adjustmen maps, Agricu contracts can Plan consistent	of the compartiect with present displayed conformity with a sadopted by any local planning agall identify the nesions by another puscommission's decisto make the project, state, regional, of see plans, or zoning land use decistant and use decistant, parcel merge altural Land Concellation, and Airpacy determinations.	and expected any long-range federal, state, tencies. The ed, if any, for ablic agency or sion that would ect conform to bor local coastal or gordinances. Sions include: ag changes, lot rs, subdivision servation Act bort Land Use	Section 5.9.1 Section 5.9.1.2 Section 5.9.2 Section 5.9.2.1 Section 5.9.2.2 Section 5.9.2.3 Section 5.9.2.6 Section 5.9.3 Section 5.9.3.1 Section 5.9.3.2 Section 5.9.3.3 Section 5.9.3.4 Section 5.9.5 Section 5.9.5 Section 5.9.6				
Appendix B (g) (3) (C)	on which the proposed site parcel, describ merging or other so that the proposed and temporary located on a need not occ	of the legal status of project is proposed project, expressed project, expressed project, expressingle legal parcel cur prior to a det must be complet action.	osed. If the than one legal dimetable for those parcels cluding linears ag area, will be. The merger cision on the	Section 5.9.1.2 Section 5.9.1.3 Table 5.9-1 Table 5.9-2 Figure 5.9-3				
Appendix B (g) (3) (D)	A map at a description of a	scale of 1:24,00 agricultural land use ted by the propose	es found within	Section 5.9.1 Section 5.9.2.1 Section 5.9.2.2 Figure 5.9-1 Figure 5.9-2				

Adequacy Issue:	Adequate	Inadequate	DAT	A ADEQUACY WORK	SHEET	Revision No.	0	Date	
Technical Area:	Land Use	•	Project	: SES Solar One	SES Solar One		taff:		
Project Manager:			Docket			Technical S	enior:		
SITING REGULATIONS	INFORMATION			AFC Section Number	ADEQUATE YES OR NO				
Appendix B (g) (3) (D) (i)	cultivation pract			Section 5.9.2.2					
Appendix B (g) (3) (D) (ii)	prime, of state	and affected by wide importance he California and	e, or unique a	s Section 5.9.4					
Appendix B (g) (3) (D) (iii)	agricultural land related facilities Land Conservatopy and a d	t, and cumulated uses. If the pass are subject to ation contract, projecting of the inceling of such contracts.	roposed site of an Agricultur rovide a writte e status of th	Section 5.9.2.2 Section 5.9.3 n Section 5.9.3.1					
Appendix B (i) (1) (A)	state, and feder permits application conformance with shall explicitly application where or standard coperation of the	andards, adopted eral land use pla ble to the propose of the application of the propose of the application of the preference perein conformance during both coefacility is discussed.	ns, leases, an sed project, an ability of, an table or matroages in the, with each launstruction an sed; and	Section 5.9.3.1 I, Section 5.9.5 d Section 5.9.6 d Table 5.9-4 d Table 5.9-5 x Table 5.9-6 e Table 5.9-7					
Appendix B (i) (1) (B)	Tables which jurisdiction to is and approvals regulations, st regional, state agencies which enforcement a	identify each ssue applicable por to enforce tandards, and and federal land would have per uthority, but for ecommission to design to the state of t	agency wit permits, lease: identified law: adopted loca use plans, and rmit approval of the exclusiv	5, Table 5.9-5 5, Table 5.9-6 1, Table 5.9-7 d or e					

Adequacy Issue:	Adequate	Inadequate	DATA	ADEQUACY WORKS	SHEET	Revision No.	0	Date	
Technical Area:	Land Use	-	Project:	SES Solar One		Technical Sta	aff:	•	•
Project Manager:			Docket:		1	Technical Se	nior:		
SITING REGULATIONS	INFORMATION	I		AFC Section Number	ADEQUATE YES OR NO	*			
Appendix B (i) (2)	(required), a official who and also pro	title, phone number number of the was contacted within bounded the name of the sacontact person for	known), of an each agency, e official who						
Appendix B (i) (3)	authority of t the steps th	indicating when perming the commission will be the applicant has taked to such permits.	obtained and	Section 5.9.6.5 Table 5.9-7					







